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EXAMINER
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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* CHRISTOPHER S. DEL SORDO,  
PATRICK J. LEARY, JOHN A. SCHLACK,  
and YEQING WANG

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Appeal 2016-003544  
Application 12/964,379  
Technology Center 2400

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Before DEBRA K. STEPHENS, KEVIN C. TROCK, and  
JESSICA C. KAISER, *Administrative Patent Judges*.

TROCK, *Administrative Patent Judge*.

DECISION ON APPEAL

*Introduction*

Appellants<sup>1</sup> seek review under 35 U.S.C. § 134(a) from a final rejection of claims 14–26.<sup>2</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> According to Appellants, the real party in interest is ARRIS Technology, Inc. App. Br. 3.

<sup>2</sup> Claims 1–13 have been withdrawn. App. Br. 16–20.

*Invention*

The claims are directed to a switched digital video (SDV) system that tunes from a first SDV service to a second SDV service at a requested time.

Abstract.

*Exemplary Claim*

Claim 14, reproduced below, is illustrative of the claimed subject matter with disputed limitations emphasized:

14. A method, comprising:

*sending a content stream in a Quadrature Amplitude Modulation (QAM)-based switched digital video (SDV) system, the content stream including sequential content associated with a first SDV service and sequential content associated with a second SDV service, wherein a tune request at a tune request time initiates a transition of the content stream from the first SDV service to the second SDV service;*

*inserting, in the sequential content associated with the first SDV service, a set up service trigger in the content stream before the tune request time, the set up service trigger including information associated with the tune request;*

*receiving a setup request at a setup request time, responsive to the set up service trigger, from a subscriber location associated with a service group, wherein the setup request is to set up the second SDV service for delivery over the QAM-based SDV system to the service group, wherein the setup request time is earlier than the tune request time, wherein a time difference between the setup request time and the tune request time is greater than a service set up time for the second SDV service;*

*receiving, from the subscriber location, a service select request to tune to the second SDV service; and*

*sending the second SDV service to the service group at the tune request time.*

*Applied Prior Art*

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Pedlow	US 2006/0274208 A1	Dec. 7, 2006
Killian et al. ("Killian")	US 7,340,457 B1	Mar. 4, 2008
Akhter	US 2008/0229379 A1	Sept. 18, 2008
Haberman et al. ("Haberman")	US 2009/0094634 A1	Apr. 9, 2009

REJECTIONS

The Examiner made the following rejections:

Claims 14–16, 19–22, 25, and 26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Haberman and Akhter. Final Act. 2–11.

Claims 17 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Haberman, Akhter, and Killian. *Id.* at 12–13.

Claims 18 and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Haberman, Akhter, and Pedlow. *Id.* at 13–14.

ANALYSIS

We have reviewed the Examiner's rejections and the evidence of record in light of Appellants' argument that the Examiner has erred. We disagree with Appellants' arguments and conclusions. We adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–18) and the findings and the reasons set forth in the Examiner's Answer (Ans. 2–9). We concur with the conclusions reached by the Examiner and further highlight specific findings and argument for emphasis as follows.

*Independent Claims 14, 20, and 26*

*“a switched digital video (SDV) system”*

Appellants contend Haberman does not teach “a **Quadrature Amplitude Modulation (QAM)-based switched digital video (SDV) system**,” as recited in claim 14 and similarly recited in claims 20 and 26. App. Br. 8–9; Reply Br. 2–3. Specifically, Appellants argue “Haberman teaches an Internet protocol television (IPTV) system[,] but Haberman does not teach the use of an SDV system” (App. Br. 8).

The Examiner finds, however, and we agree, Haberman teaches an IPTV content streaming system which sets the “proper timing and scheduling” in order to switch “between multicast and unicast streams” of content. Final Act. 2–3 (citing Haberman ¶¶ 16–18, 75–76), 18; *see* Ans. 5. The Examiner further finds, and we agree, Akhter teaches “the concept of a QAM-based SDV system” that switches between content streams, i.e., changes channels. Ans. 5; Final Act. 5 (citing Akhter ¶¶ 46, 48, 51). The Examiner applies Haberman’s teachings to Akhter, “allowing for” switching streams in a QAM-based SDV system with proper timing and scheduling. Final Act. 4–5, 18; Ans. 5.

Appellants’ argument that Haberman individually does not teach an SDV system (App. Br. 8–9; Reply Br. 2–3) is unpersuasive because the rejection is based on a combination of references, i.e., Haberman and Akhter. *In re Keller*, 642 F.2d 413, 426 (CCPA 1981). In particular, Appellants have not persuasively addressed the Examiner’s combination of Haberman and Akhter, which relies on Akhter to teach “the concept of a QAM-based SDV system.” Ans. 5. Accordingly, we are not persuaded the Examiner erred in finding the combination of Haberman and Akhter teaches

“a Quadrature Amplitude Modulation (QAM)-based switched digital video (SDV) system,” within the meaning of claims 14, 20, and 26.

*“a first SDV service . . . a second SDV service”*

Appellants contend Haberman does not teach “**a first SDV service . . . a second SDV service**,” as recited in claim 14 and similarly recited in claims 20 and 26. App. Br. 9–10. Specifically, Appellants argue Haberman teaches “multicast and unicast **streams** of an IPTV system,” but those streams are not “identified as SDV services.” App. Br. 10.

We are not persuaded. As discussed *supra*, the Examiner modifies Haberman, which teaches setting proper timing and scheduling for switching multicast and unicast, i.e., first and second, content (Ans. 4; Final Act. 2–3 (citing Haberman ¶¶ 16–18, 75–76)), with Akhter, which switches between QAM-based SDV content services (Ans. 4–5; Final Act. 5 (citing Akhter ¶¶ 46, 48, 51), in order to set the proper timing and scheduling for switching content in a QAM-based SDV system (Final Act. 4–5, 18; Ans. 5).

Appellants’ argument that Haberman does not individually teach first and second SDV services (App. Br. 9–10) is unpersuasive because the rejection is based on a combination of references, i.e., Haberman and Akhter. *See Keller*, 642 F.2d at 426. In particular, as discussed *supra*, Appellants have not persuasively addressed the Examiner’s combination of Haberman and Akhter, which applies Haberman’s content switching to switch “QAM-based SDV” content services, as taught by Akhter. Final Act. 4–5, 18; *see* Ans. 5. Accordingly, we are not persuaded the Examiner erred in finding the combination of Haberman and Akhter teaches “a first SDV service . . . a second SDV service,” within the meaning of claims 14, 20, and 26.

*“tune request”*

Appellants contend Haberman does not teach a tune request” and a “set up service trigger” as recited in claim 14 and similarly recited in claims 20 and 26. App. Br. 12–13; Reply Br. 3. Specifically, Appellants argue that “tuning” and “tune request” have meanings used by persons having skill in the art (Reply Br. 3), and Haberman’s “insertion signals” are not a “set up service trigger” or a “tune request” which “tune[s] to any service that is set up by a set up service trigger and that is associated with a service set up time” (App. Br. 12 (emphasis omitted)).

We are not persuaded. The Examiner finds, and we agree, Haberman’s client notification is a set up service trigger because the client notification “is embedded in a header of a multicast stream” and, when detected, triggers “the client [to] request[ ] a unicast advertising stream.” Ans. 9 (citing Haberman ¶ 48). The Examiner further finds, and we agree, the client’s request for the unicast advertising stream is a tune request because the client’s request for the unicast advertising stream causes the client “to receive a desired advertisement.” *Id.*

Appellants’ argument that Haberman’s insertion signals are not a “set up service trigger” or a “tune request” (App. Br. 12) does not address the Examiner’s finding that Haberman’s client notification triggers a client request for a unicast stream (Ans. 9 (citing Haberman ¶ 48)). Furthermore, Appellants’ argument that Haberman does not request tuning (Reply Br. 3) is not commensurate with the scope of the claim. Appellants do not proffer an interpretation of “tune” or “tune request” (*see id.*) and neither the Specification nor the claims provide explicit definitions of “tune” or “tune request” which preclude switching to and receiving a particular content

stream. Accordingly, we determine the Examiner broadly, but reasonably interpreted, in light of the Specification, Haberman’s client request, which causes a client to switch from a multicast stream to receive a requested unicast stream, as a tune request causing the client to tune into the requested unicast stream. Ans. 9; *see* Haberman ¶¶ 75–82, Fig. 4.

Additionally, even assuming *arguendo*, that Haberman’s client request does not “tune” into content, Appellants have not addressed the Examiner’s finding that the combination of Haberman and Akhter teaches requested “tunable channels.” Ans. 4. In particular, Appellants do not address the Examiner’s finding, which we agree with, that Akhter “transmits tunable channels” in a QAM-based SDV system. Ans. 4; Final Act. 4 (citing Akhter ¶ 26, 48, 51).

Accordingly, we are not persuaded the Examiner erred in finding that Haberman teaches a “tune request” and a “set up service trigger” within the meaning of claims 14, 20, and 26.

#### *Principle of Operation*

Appellants contend the Examiner improperly combined Haberman and Akhter because the combination would “**chang[e] the principle of operation** of Haberman.” App. Br. 10–11. Specifically, Appellants argue “[m]odifying the IPTV system of Haberman . . . to a system that supports QAM-based tuning” changes Haberman’s principle of operation. *Id.* Appellants further argue that an IPTV system that supports QAM-based tuning does not exist. *Id.* at 11.

We are not persuaded. As discussed *supra*, the Examiner’s combination extends Haberman’s teaching of “proper[ly] tim[ed] and schedul[ed]” content switching to Akhter in order to provide timely and



scheduled content switching for Akhter's QAM-based SDV content. Final Act. 4, 18.

Appellants conclude that extending Haberman's timely and scheduled switching to QAM-based SDV content would change Haberman's principle of operation (App. Br. 11), but have not proffered sufficient evidence or argument that an ordinarily skilled artisan would have been unable to combine the teachings and suggestions of Haberman and Akhter to achieve the intended purpose. *In re Pearson*, 494 F.2d 1399, 1405 (CCPA 1974) ("Attorney's argument in a brief cannot take the place of evidence."). Moreover, the Examiner's combination applies Haberman's teachings to Akhter's system (Final Act. 4, 18), rather than changing Haberman's principle of operation. Furthermore, Appellants' argument that the Haberman and Akhter combination is a "chimera that . . . has not been shown to actually exist" (App. Br. 11) is not persuasive because the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art, not whether or not the claimed invention is disclosed in a single reference. *See Keller*, 642 F.2d at 425; *In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991). Indeed, the Examiner's reasoning for the combination is supported by rational underpinning — providing timely and scheduled switching of content for another content system, i.e., a QAM-based SDV system (Final Act. 4, 18). Accordingly, we are not persuaded the Examiner improperly combined Haberman and Akhter in rejecting claims 14, 20, and 26.

*Dependent Claims 15–19 and 21–25*

Appellants do not argue separate patentability for dependent claims 15–19 and 21–25 which depend directly or indirectly from claims 14 or 20.

App. Br. 14. For the reasons set forth above, therefore, we are not persuaded the Examiner erred in rejecting these claims. *See In re Lovin*, 652 F.3d 1349, 1356 (Fed. Cir. 2011) (“We conclude that the Board has reasonably interpreted Rule 41.37 to require applicants to articulate more substantive arguments if they wish for individual claims to be treated separately.”). Accordingly, we sustain the Examiner’s rejections of claims 15–19 and 21–25. *See* 37 C.F.R. § 41.37(c)(1)(iv).

#### DECISION

We AFFIRM the Examiner’s 35 U.S.C. § 103 rejections of claims 14–26.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED